

FIG. 1

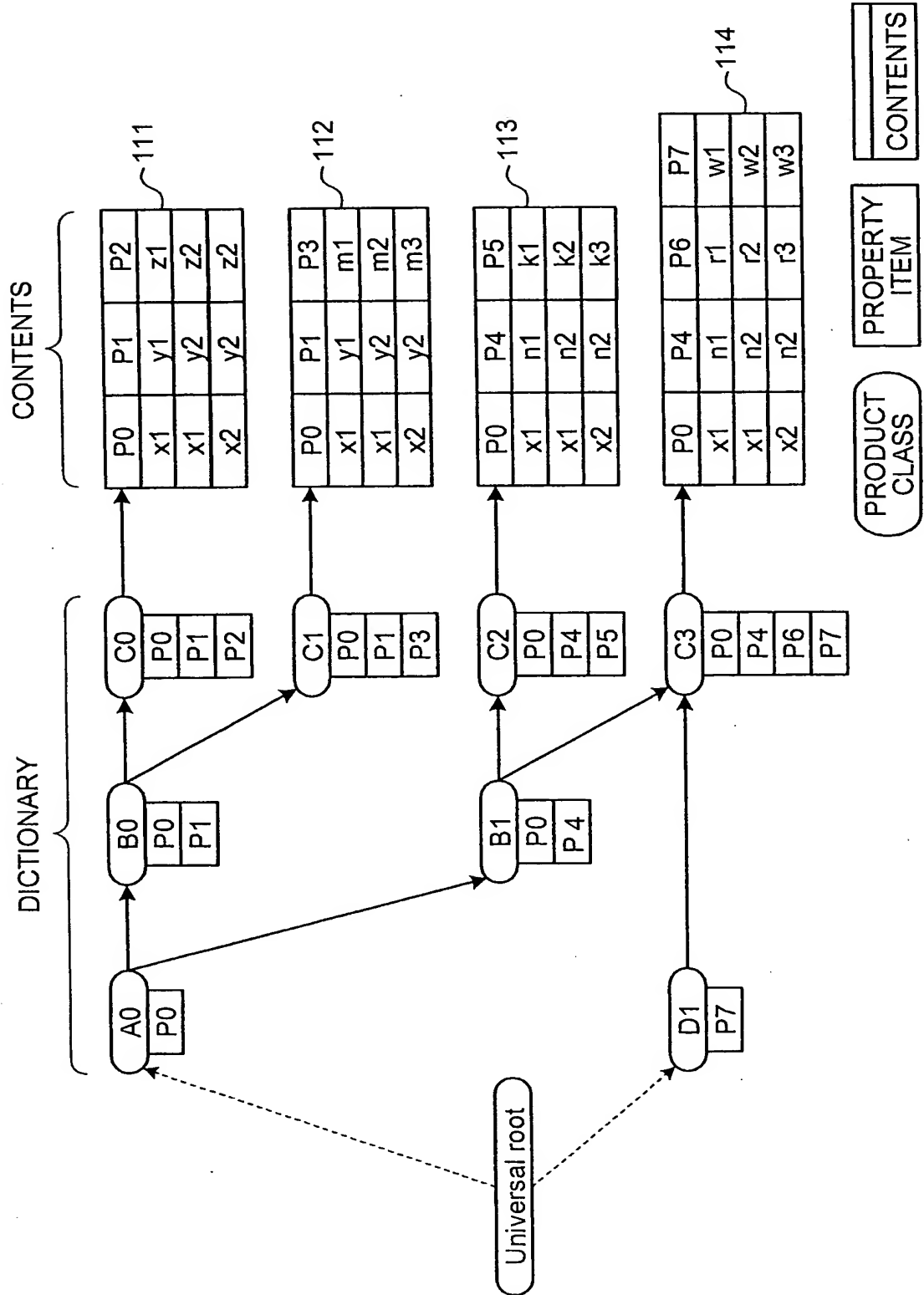


FIG.2

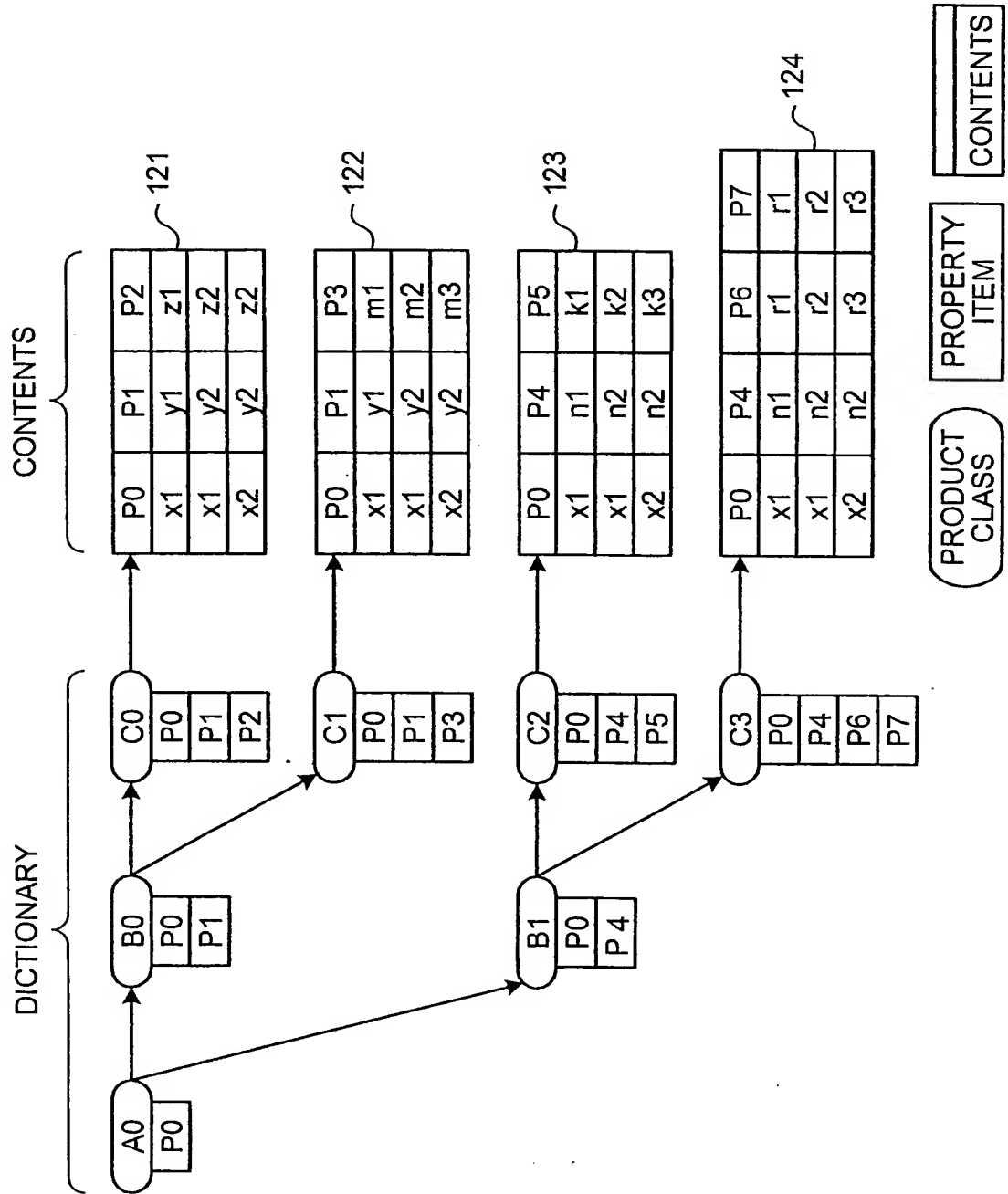


FIG.3

Attribute	Add	Modify	Delete	Obligation
code	-	X	X	M
superclass	V	V	V	O
preferred name	-	R	X	M
short name	-	R	X	M
visible types	V	V	X	O
applicable types	V	V	X	O
class selection properties	V	V	X	O
synonymous name	R	R	R	O
visible properties	V	V	X	O
applicable properties	V	V	X	O
class value assignment	V	V	X	O
definition	-	R	X	M
source document of definition	R	R	R	O
note	R	R	R	O
remark	R	R	R	O
simplified drawing	-	R	R	O
date of original definition	-	X	X	M
date of current version	-	V	X	M
date of current revision	-	R / V	X	M
version number	-	V	X	M
revision number	-	R	X	M

AVAILABILITY OF CORRECTION AND
CHANGE OF CLASSES

DESCRIPTION OF SYMBOLS

--: IMPOSSIBLE

R: INCREASE IN REVISION

V: INCREASE IN VERSION

X: UNALLOWABLE AND FORBIDDEN ITEM

R/V: R OR V ACCORDING TO CONTENTS

X/R: X OR R ACCORDING TO CONTENTS

FIG.4

Attribute	Add	Modify	Delete	Obligation
code	-	X	X	M
definition class	X	X	X	M
data type	-	V	X	M
preferred name	-	R	X	M
short name	-	R	X	M
preferred letter symbol	R	R	X	O
synonymous letter symbol	R	R	R	O
synonymous name	R	R	R	O
property type classification	-	R	X	O
definition	-	R / V	X	M
source document of definition	R	R	R	O
note	R	R	R	O
remark	R	R	R	O
unit	-	X	X	M
condition	X	X / V	X	M
formula	R	R	R	O
format	-	X	X	M
date of current revision	-	V	X	M
date of current version	-	R / V	X	M
date of current revision	-	V	X	M
version number	-	R	X	M
revision number	-	V	X	M

AVAILABILITY OF CORRECTION AND
CHANGE OF PROPERTIES

DESCRIPTION OF SYMBOLS

--: IMPOSSIBLE

R: INCREASE IN REVISION

V: INCREASE IN VERSION

X: UNALLOWABLE AND FORBIDDEN ITEM

R/V: R OR V ACCORDING TO CONTENTS

X/R: X OR R ACCORDING TO CONTENTS

FIG.5

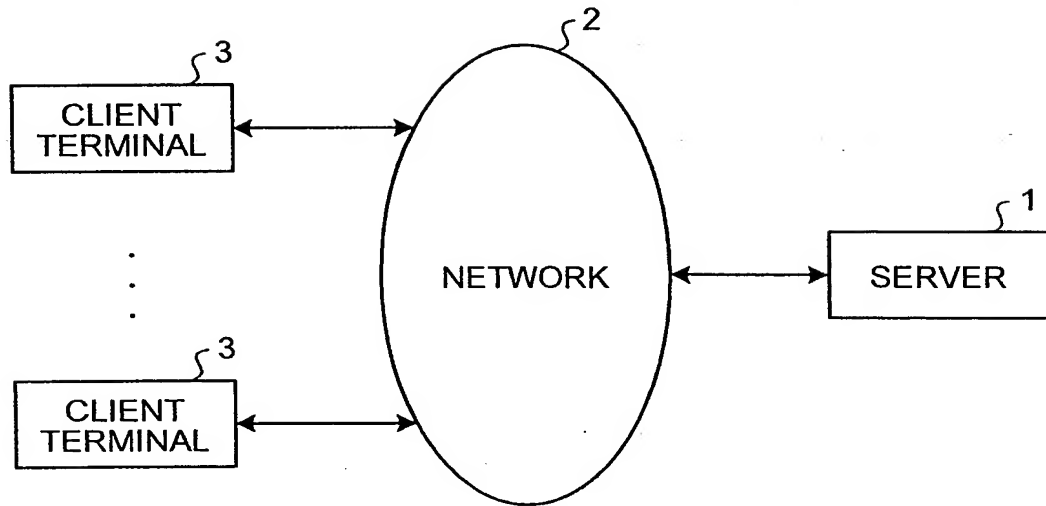


FIG.6

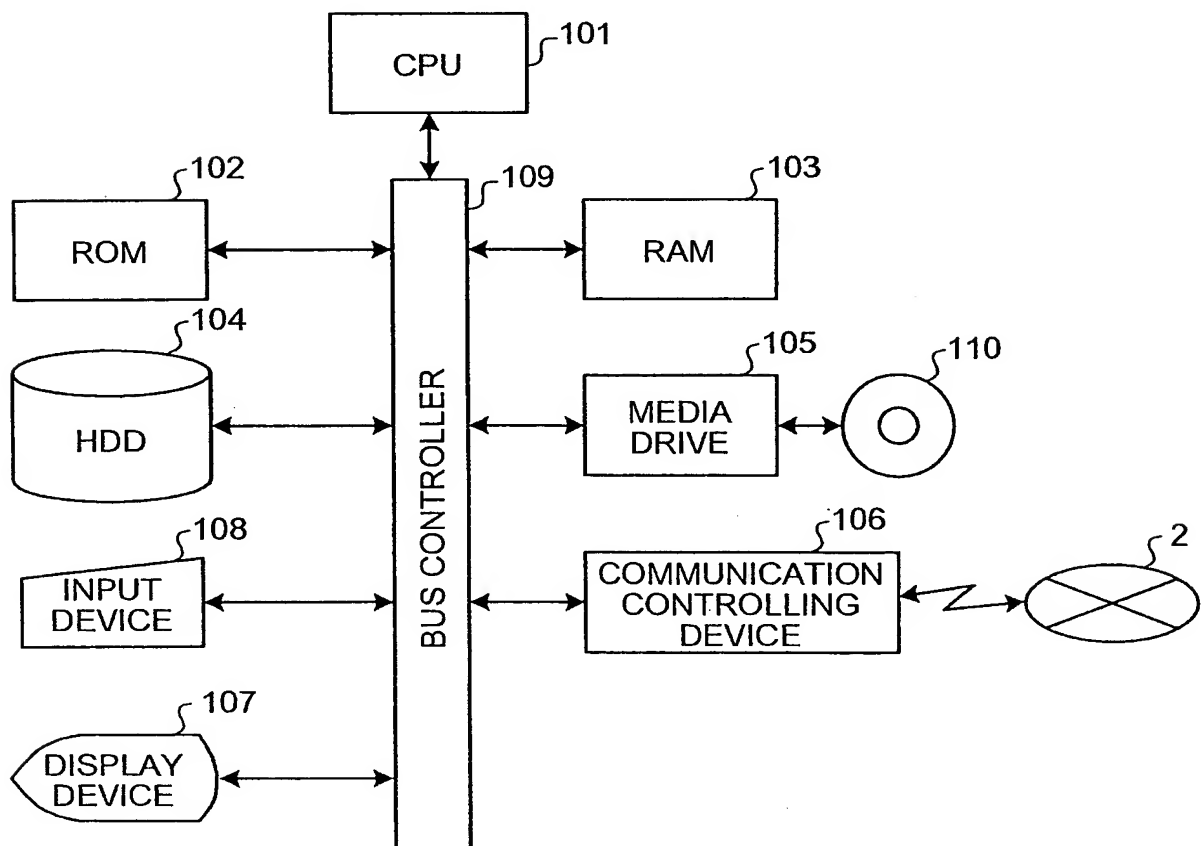


FIG.7

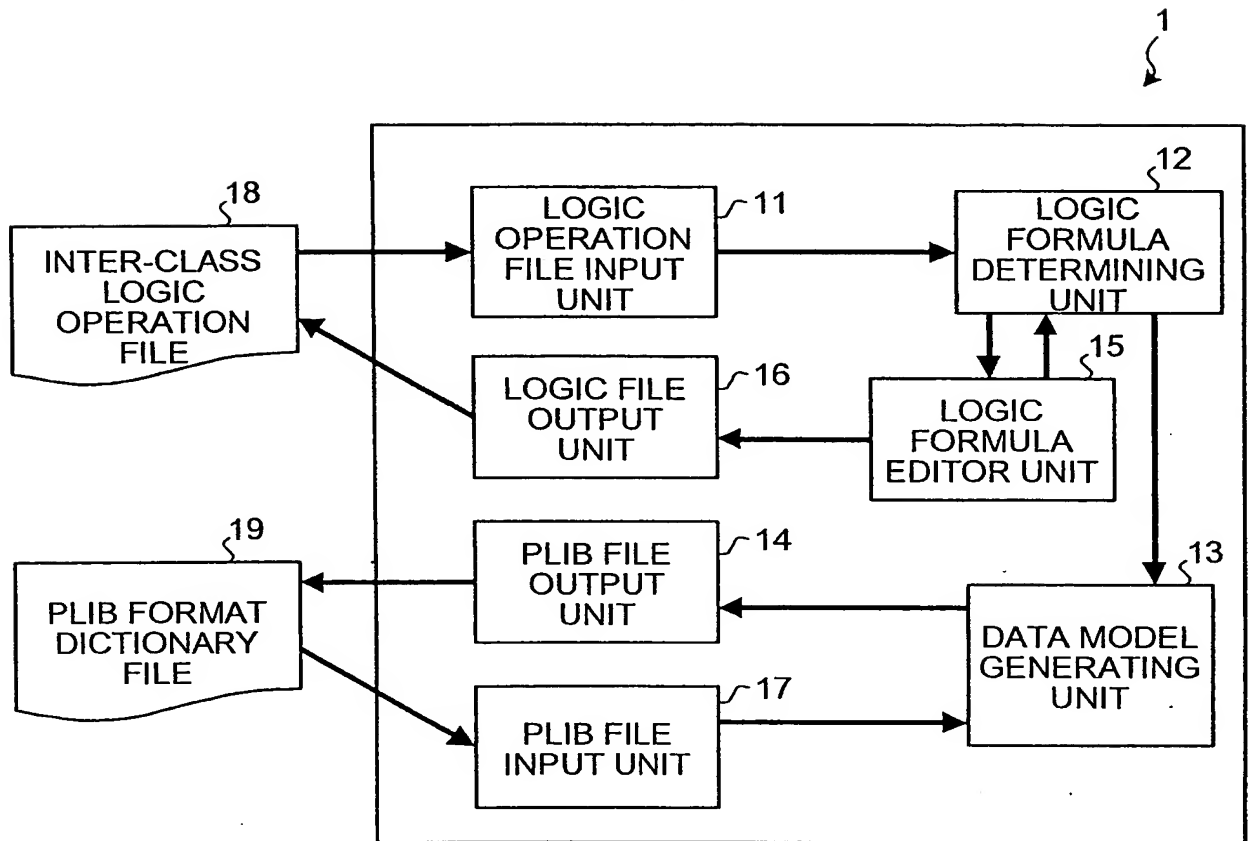


FIG.8

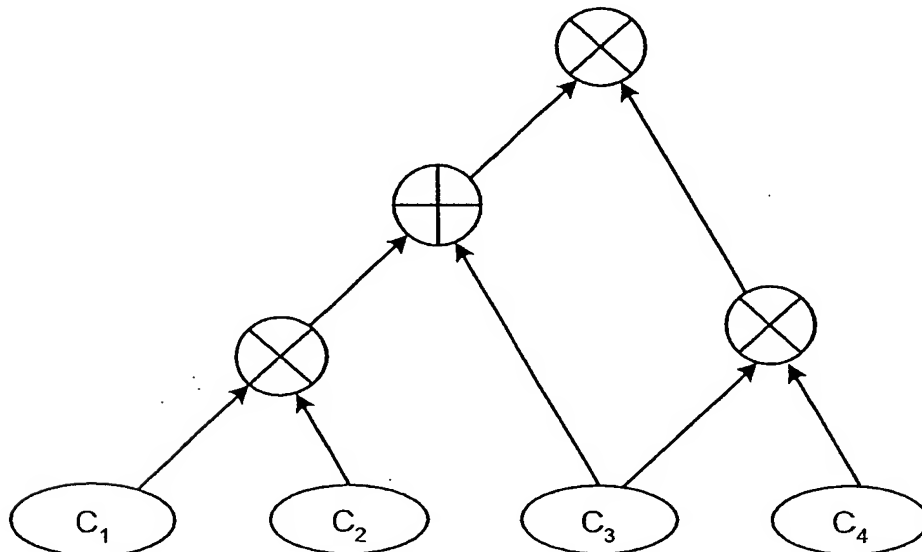


FIG.9

```
Union
{
    Inter (C1, C2, C3,C4)
    Inter(C3, C4)
}
```

FIG.10

```
· #1 = Inter ('#2', '#3') ;
· #2=Union ('#4', '#5') ;
· #3= Inter ('#5', '#6') ;
· #4= Inter ('#8', '#9') ;
· #8=ClassNode ('C1') ;
· #9=ClassNode ('C2') ;
· #5=ClassNode ('C3') ;
· #6=ClassNode ('C4') ;
```

FIG.11

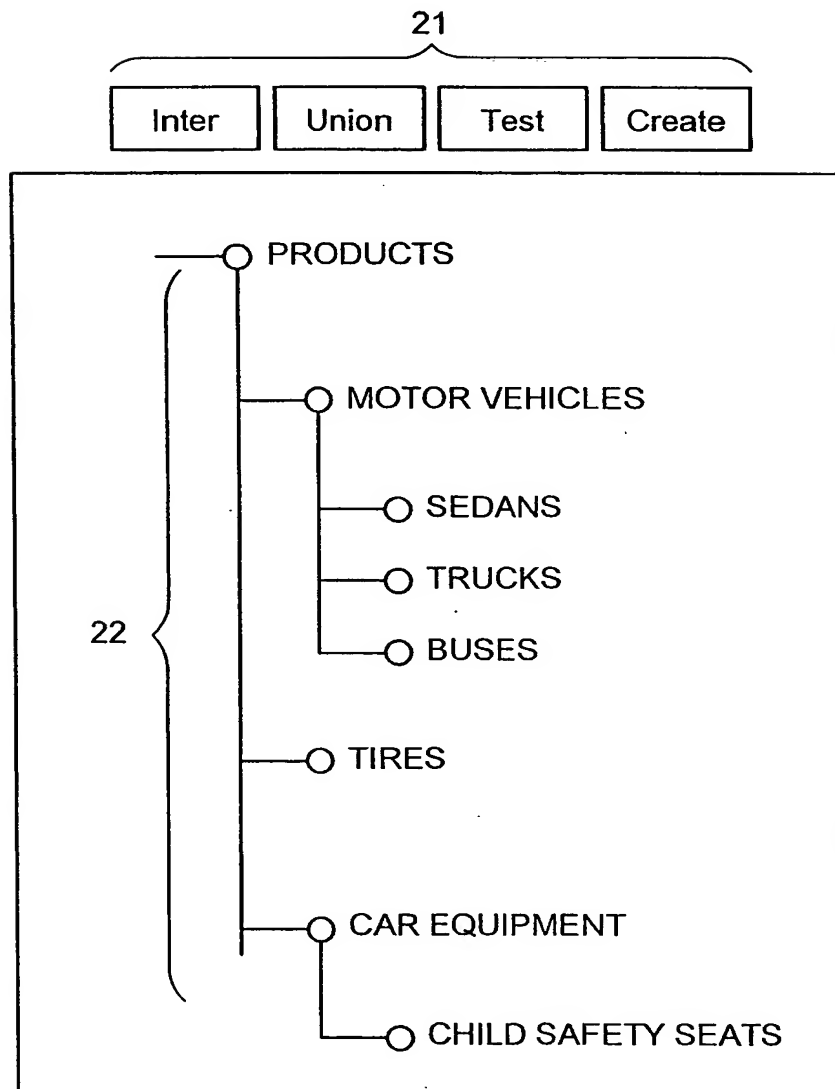


FIG.12

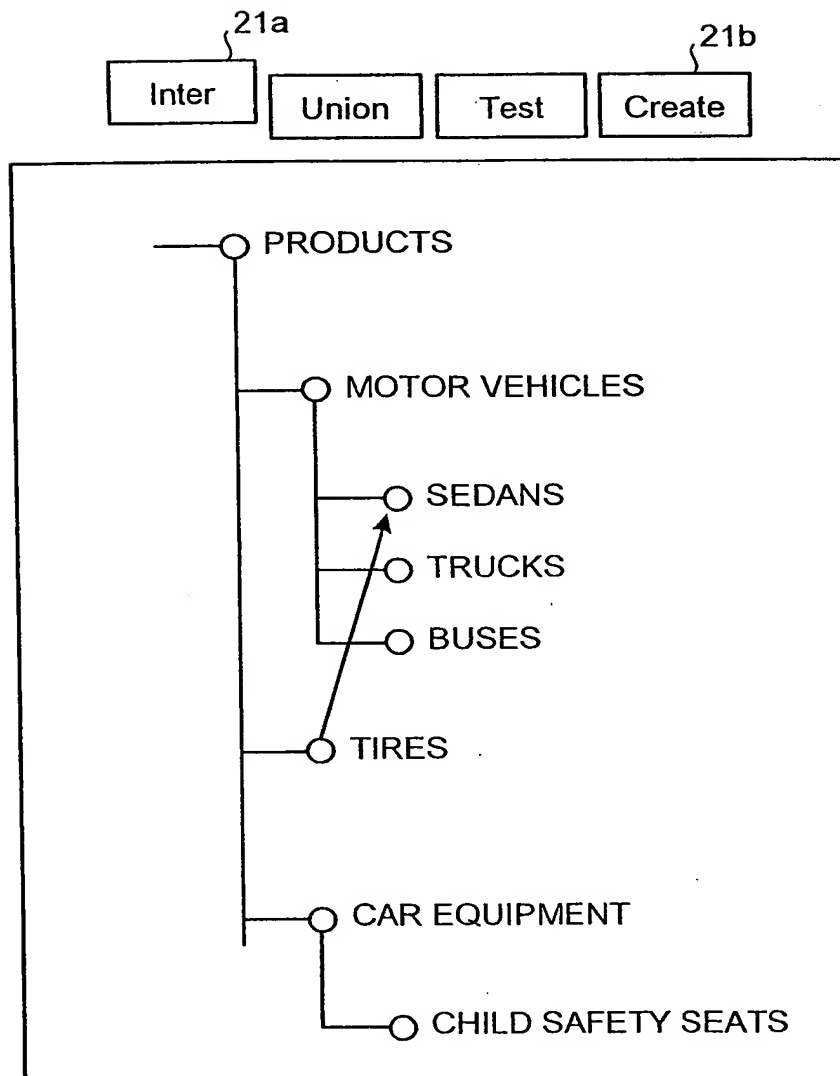


FIG.13

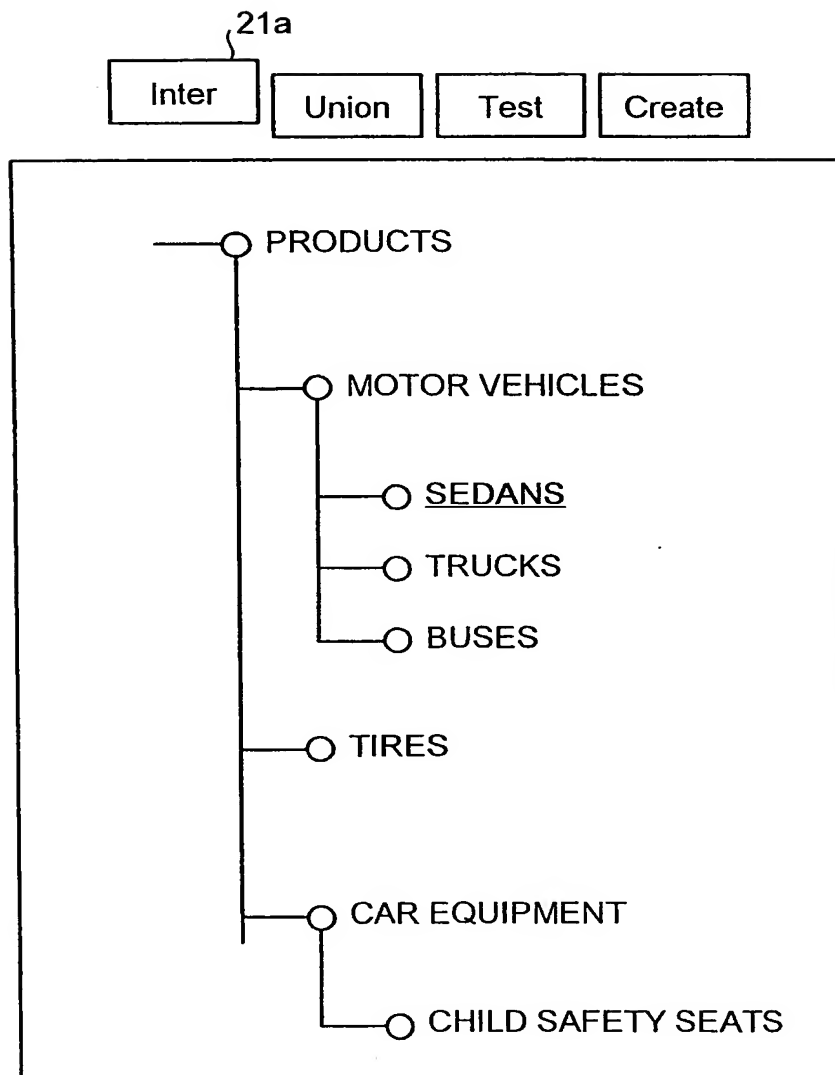


FIG.14

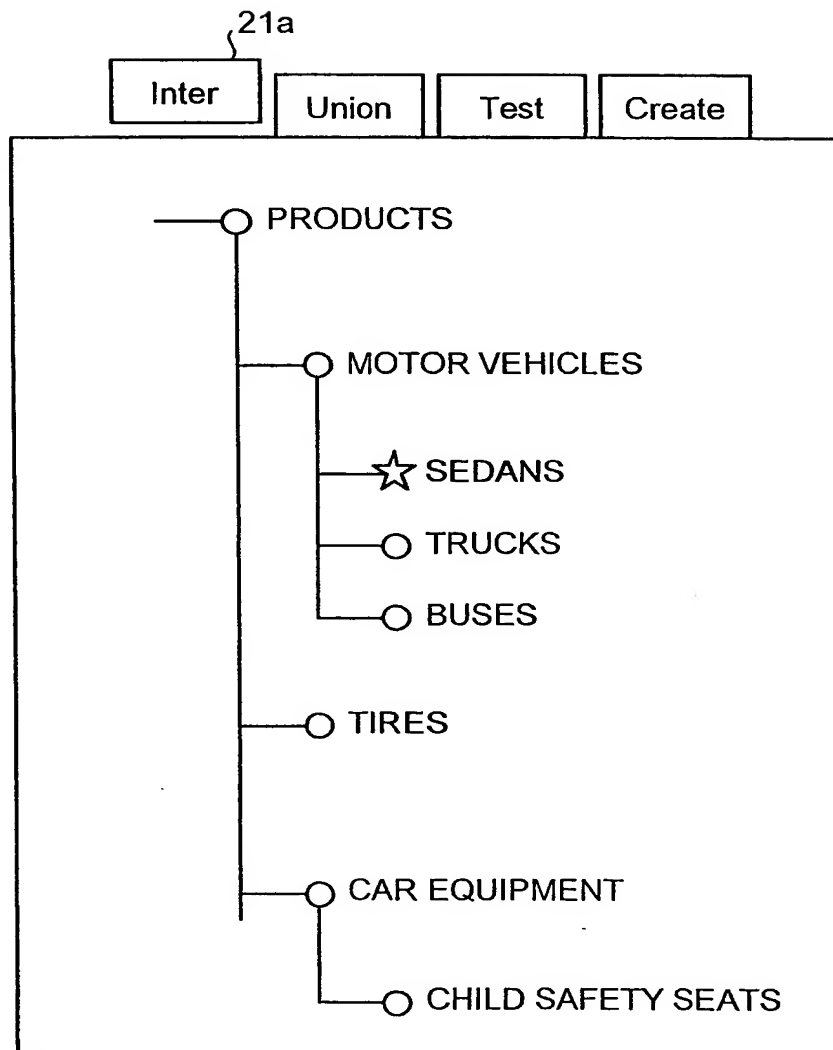


FIG.15

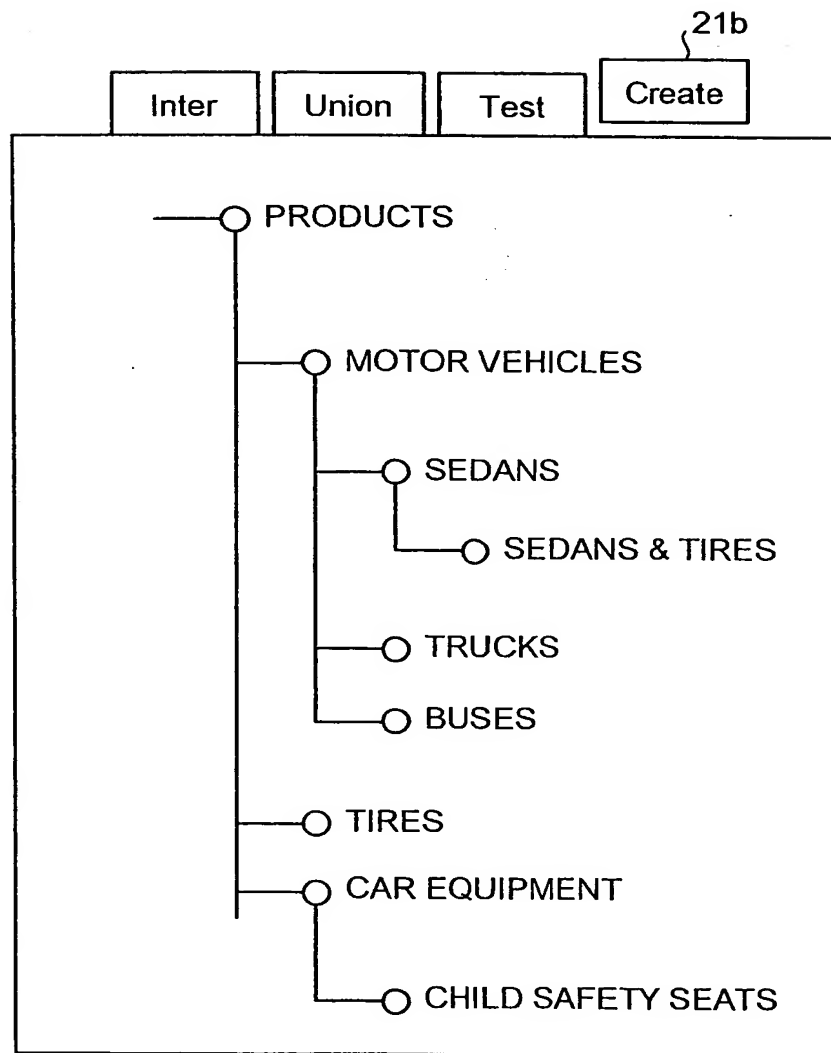


FIG.16

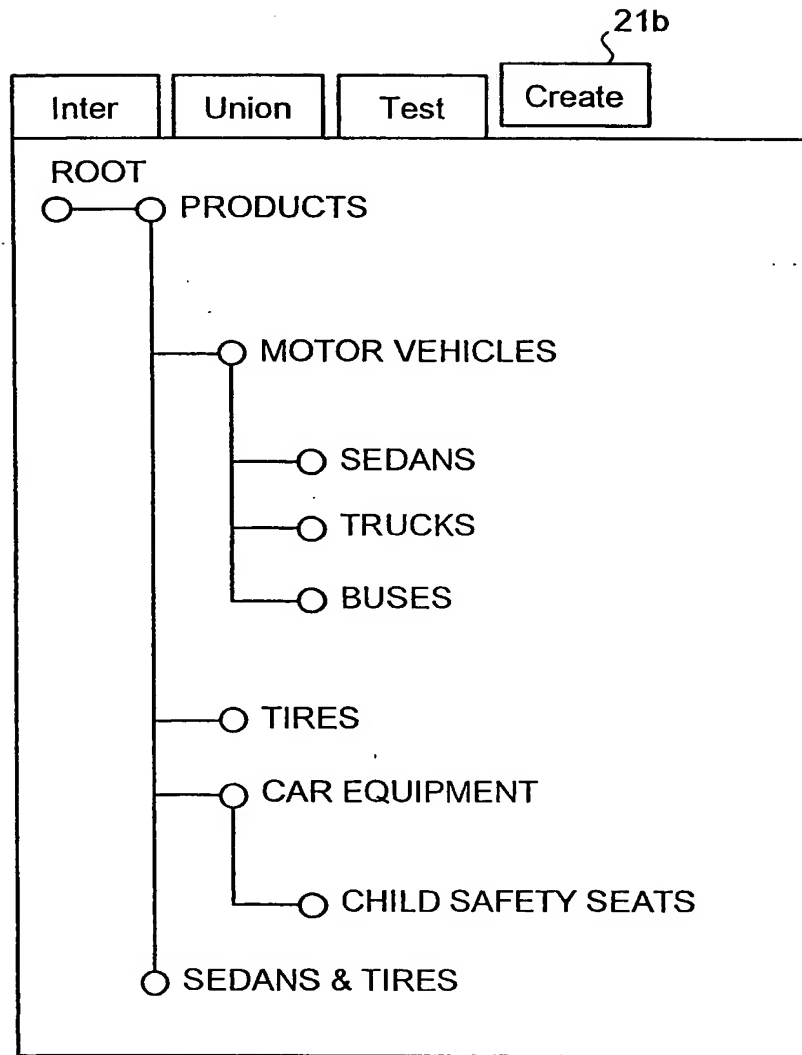


FIG.17

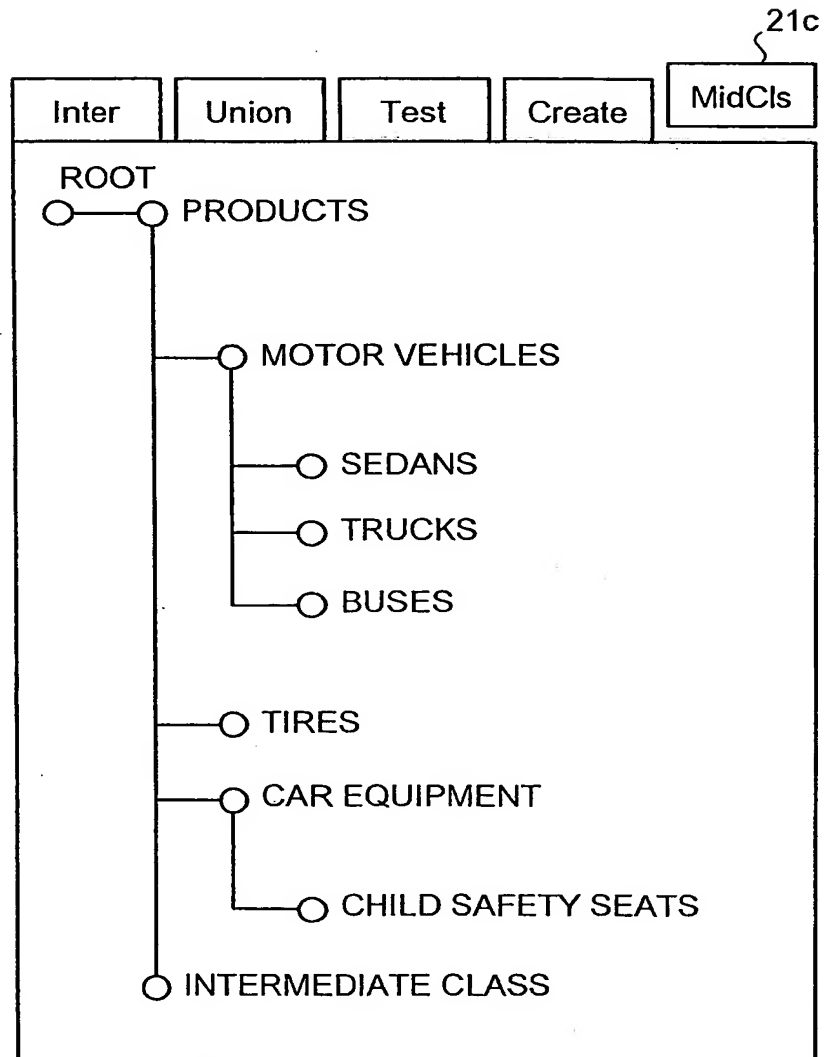


FIG.18

Inter

Union

Test

Create

PRODUCTS TOPAS_C0

MOTOR VEHICLES

SEDANS TOPAS_C1

SEDANS & TIRES TOPAS_C3

TRUCKS

BUSES

TIRES TOPAS_C2

CAR EQUIPMENT

CHILD SAFETY SEATS

CLASS INFORMATION

CLASS NAME	SEDANS & TIRES
CLASS BSU	TOPAS_C3
DEFINITION	BOX-TYPE MOTOR VEHICLE?
INFORMATION SUPPLIER	0140/TOSHIBA

B. A. PROPERTY LIST

PROPERTY NAME	DEFINITION	DEFINITION CLASS	BSU	PARENT BSU
MANUFACTURER	MANUFACTURER NAME	TOPAS_C0	TOPAS_P1	
ENGINE SIZE		TOPAS_C1	TOPAS_P2	
LENGTH	TOTAL VEHICLE LENGTH	TOPAS_C1	TOPAS_P3	
WIDTH	MAXIMUM VEHICLE WIDTH	TOPAS_C1	TOPAS_P4	
HEIGHT	MAXIMUM VEHICLE HEIGHT	TOPAS_C1	TOPAS_P5	
MANUFACTURER	MANUFACTURER NAME	TOPAS_C0	TOPAS_P1	
TIRE DIAMETER	TIRE DIAMETER	TOPAS_C1	TOPAS_P6	
TIRE NAME	TIRE NAME	TOPAS_C1	TOPAS_P7	

FIG.19

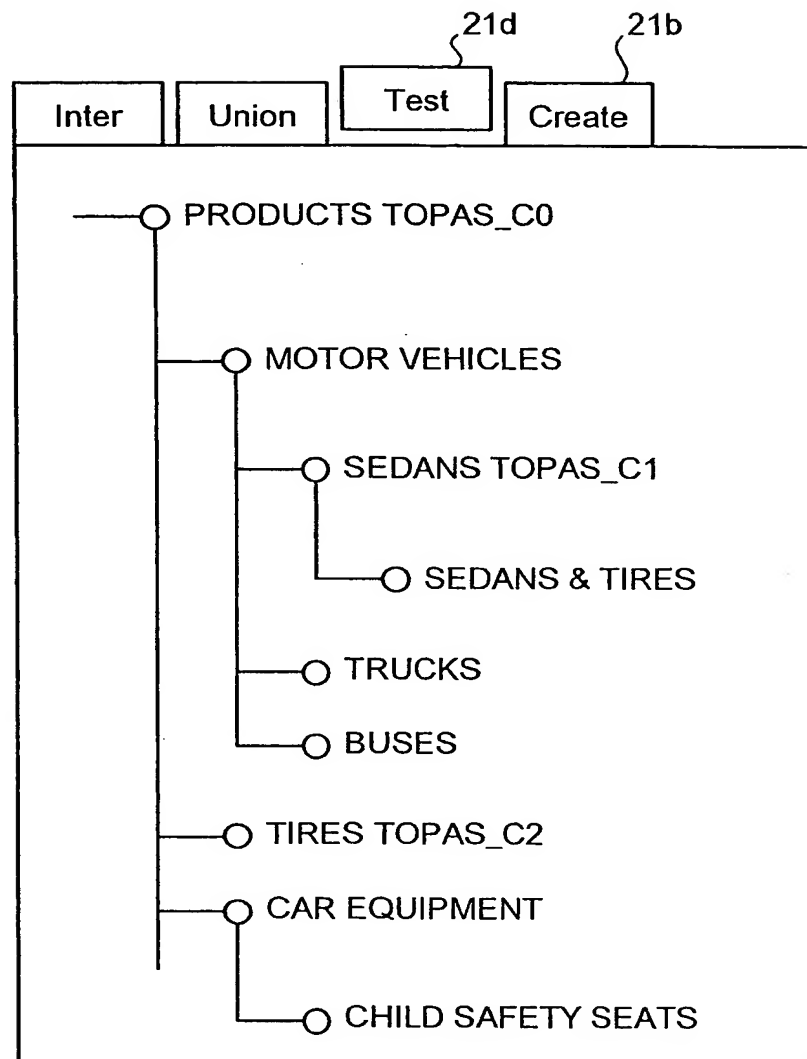


FIG.20

X

PROPERTY NAME	DEFINITION	DEFINITION CLASS	BSU	PARENT BSU	EXISTING CLASS
MANUFACTURER	MANUFACTURER NAME	TOPAS_C0	TOPAS_P1		TOPAS_C1
ENGINE SIZE		TOPAS_C1	TOPAS_P2		
LENGTH	TOTAL VEHICLE LENGTH	TOPAS_C1	TOPAS_P3		
WIDTH	MAXIMUM VEHICLE WIDTH	TOPAS_C1	TOPAS_P4		
HEIGHT	MAXIMUM VEHICLE HEIGHT	TOPAS_C1	TOPAS_P5		
MANUFACTURER	MANUFACTURER NAME	TOPAS_C0	TOPAS_P1		TOPAS_C2
TIRE DIAMETER	TIRE DIAMETER	TOPAS_C1	TOPAS_P6		
TIRE NAME	TIRE NAME	TOPAS_C1	TOPAS_P7		

FIG.21

PROPERTY NAME	DEFINITION	DEFINITION CLASS BSU	PROPERTY BSU	PARENT PROPERTY BSU
MANUFAC-TURER	MANUFACTURER NAME	TOPAS_C0	TOPAS_P1	
ENGINE SIZE		TOPAS_C1	TOPAS_P2	
LENGTH	TOTAL VEHICLE LENGTH	TOPAS_C1	TOPAS_P3	
WIDTH	MAXIMUM VEHICLE WIDTH	TOPAS_C1	TOPAS_P4	
HEIGHT	MAXIMUM VEHICLE HEIGHT	TOPAS_C1	TOPAS_P5	
MANUFAC-TURER	TIRE MANUFACTURER NAME	TOPAS_C2	TOPAS_P8	TOPAS_P1
TIRE DIAMETER	TIRE DIAMETER	TOPAS_C1	TOPAS_P6	
TIRE NAME	TIRE NAME	TOPAS_C1	TOPAS_P7	

FIG.22

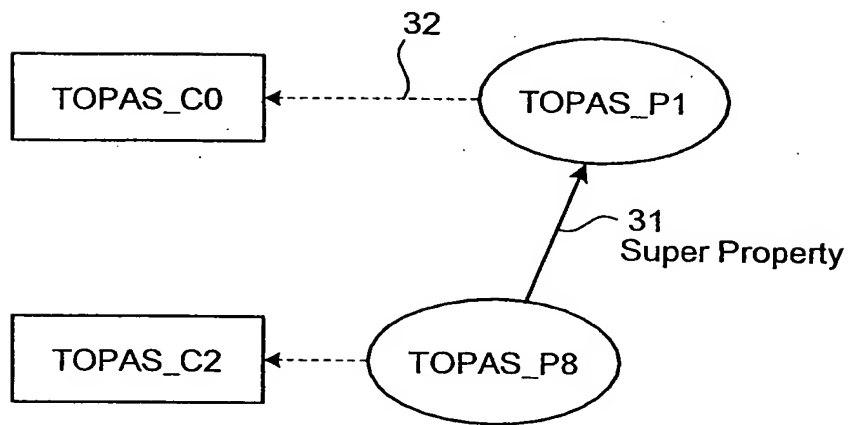


FIG.23

PROPERTY NAME	DEFINITION	DEFINITION CLASS	PROPERTY BSU	PARENT PROPERTY BSU
MANUFACTURER	MANUFACTURER NAME	TOPAS_C0	TOPAS_P1	
ENGINE SIZE		TOPAS_C1	TOPAS_P2	
LENGTH	TOTAL VEHICLE LENGTH	TOPAS_C1	TOPAS_P3	
WIDTH	MAXIMUM VEHICLE WIDTH	TOPAS_C1	TOPAS_P4	
HEIGHT	MAXIMUM VEHICLE HEIGHT	TOPAS_C1	TOPAS_P5	
MANUFACTURER	TIRE MANUFACTURER NAME	TOPAS_C2	TOPAS_P8	TOPAS_P1
TIRE DIAMETER	TIRE DIAMETER	TOPAS_C1	TOPAS_P6	
TIRE NAME	TIRE NAME	TOPAS_C1	TOPAS_P7	
MANUFACTURER	SEDAN MANUFACTURER NAME	TOPAS_C1	TOPAS_P9	TOPAS_P1

FIG.24

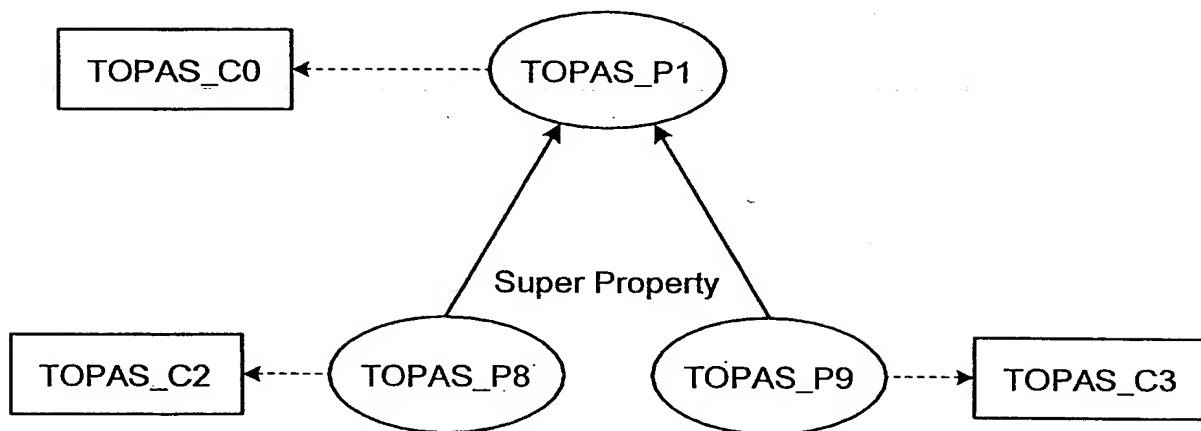


FIG.25

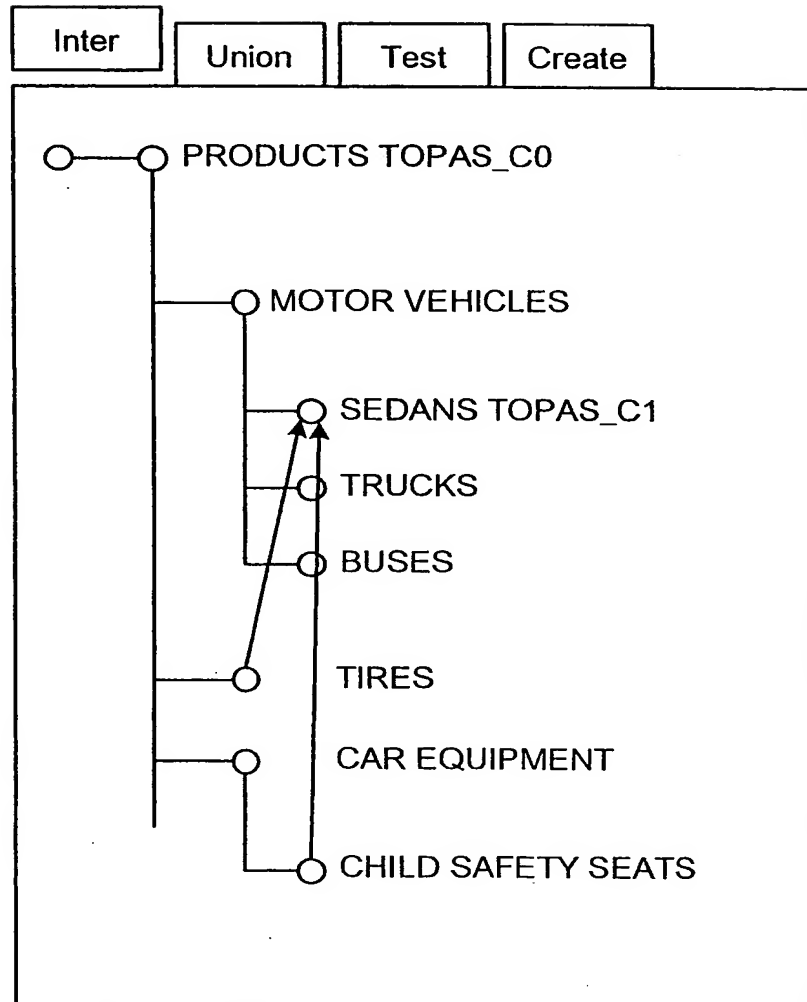


FIG.26

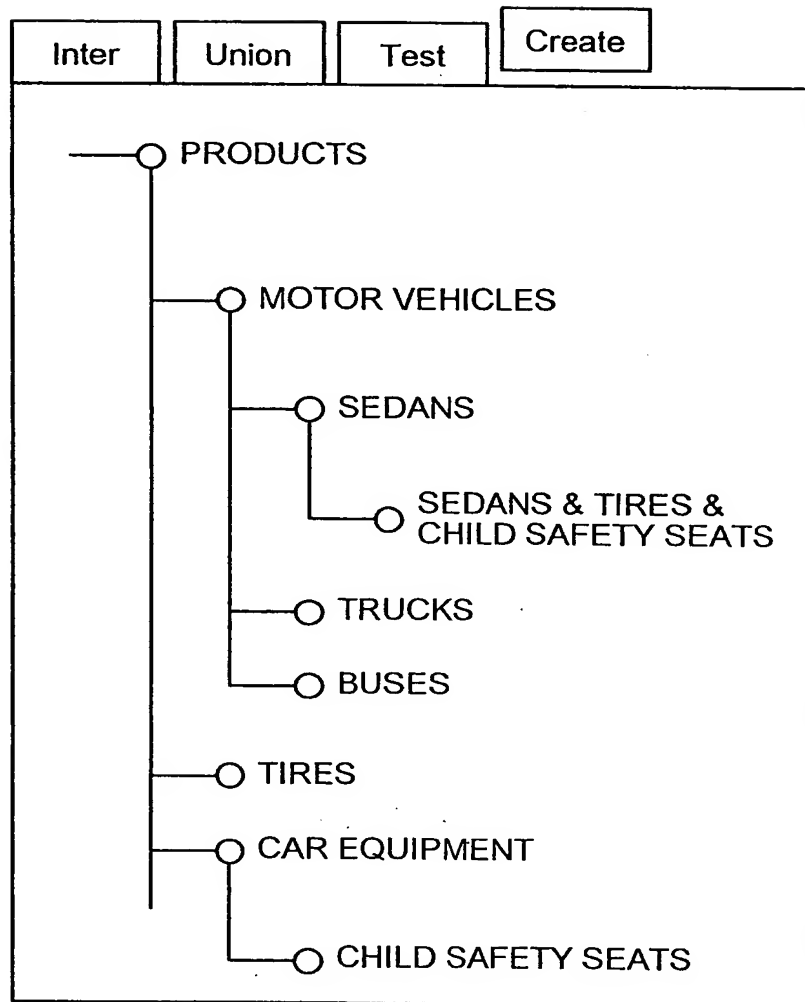


FIG.27

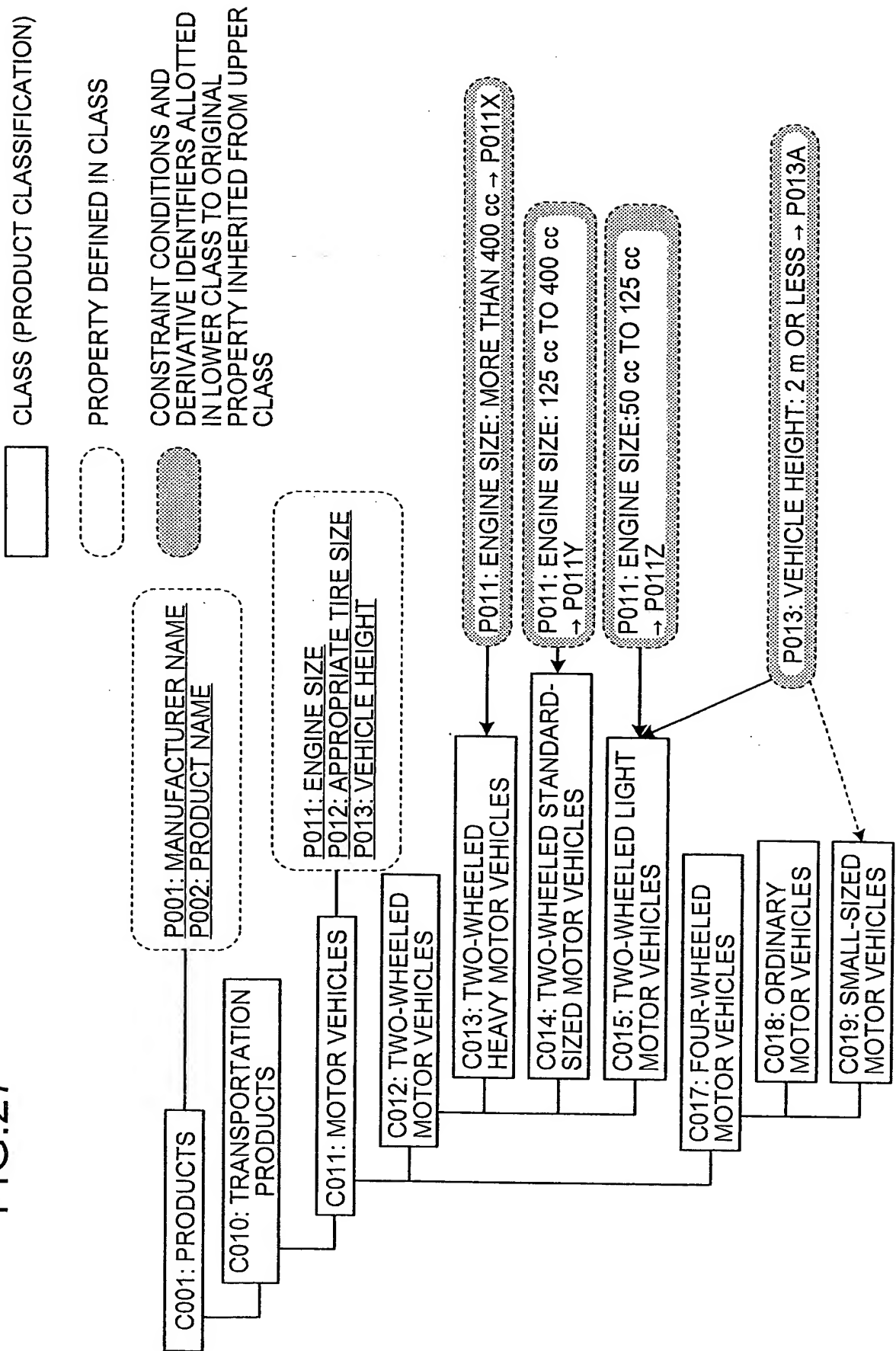


FIG.28

CONTENTS TABLE T013 EXISTING IN CLASS C013

P001 MANUFAC- TURER NAME	P002 PRODUCT NAME	P011X ENGINE SIZE (cc) CONDITIONS: MORE THAN 400 cc	P012 SUITABLE TIRE SIZE	...
COMPANY A	AAAAA	2000	195/45ZR16	...
COMPANY B	BBBBB	1500	225/60R16 98H	...
...

CONTENTS TABLE T018 EXISTING IN CLASS C018

P001 MANUFAC- TURER NAME	P002 PRODUCT NAME	P011 ENGINE SIZE (cc)	P012 SUITABLE TIRE SIZE	...
COMPANY Z	ZZZZZ	1500	100/80-21	...
COMPANY Y	YYYYY	450	100/80-21	...
...

RESULTS OF SEARCH ON CLASSES LOWER THAN CLASS C010 (SEARCH CONDITIONS P011=1500cc)

CLASS	P001 MANUFAC- TURER NAME	P002 PRODUCT NAME	P011 ENGINE SIZE (cc)	P012 SUITABLE TIRE SIZE	...
C018	COMPANY Z	ZZZZZ	1500	100/80-21	...
C013	COMPANY B	BBBBB	1500	225/60R16 98H	...

FIG.29

DERIVATIVE IDENTIFIER	RELATION	ORIGINAL IDENTIFIER	DERIVED CLASS
P011X	INHERITANCE DERIVATION	P011	C013
P011Y	INHERITANCE DERIVATION	P011	C014
P011Z	INHERITANCE DERIVATION	P011	C015
P013A	INHERITANCE DERIVATION	P013	C015, C019

FIG.30

B1

P011: ENGINE SIZE = cc

☒ SEARCH DERIVATIVE PROPERTIES TOO

B2

READ

search

P011: ENGINE SIZE DERIVATIVE PROPERTY

P011X: ENGINE SIZE (C0013: HEAVY MOTOR VEHICLES)
CONDITION: MORE THAN 400 cc

P011Y: ENGINE SIZE (C0014: TWO-WHEELED
ORDINARY MOTOR VEHICLES)
CONDITION: 125 cc TO 400 cc

P011Z: ENGINE SIZE (C0015: TWO-WHEELED
SMALL - SIZED ORDINARY MOTOR VEHICLES)
CONDITION: 50 cc TO 125 cc

FIG.31

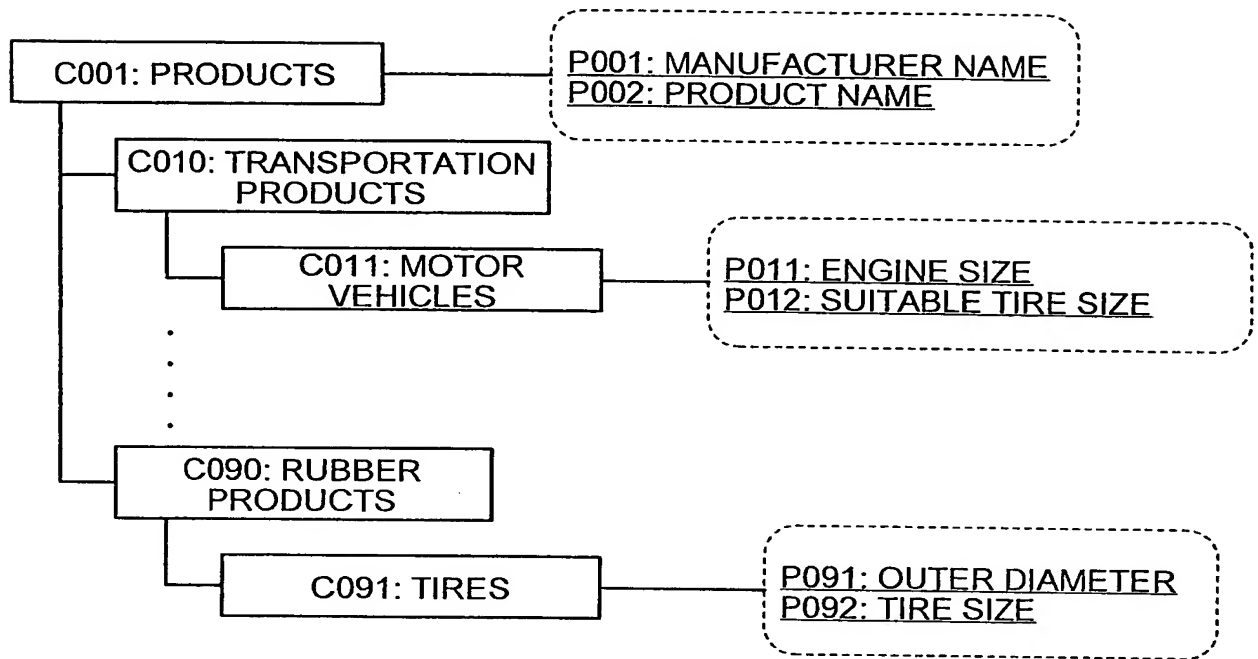


FIG.32

TABLE NAME: T01

P001	P002	P011	P012
COMPANY A	AAAAA	2000	195/45ZR16
COMPANY B	BBBBB	4494.0	225/60R16 98H

FIG.33

TABLE NAME: T02

P001	P002	P091	P092
COMPANY T_D	TDbbb	677.5	195/45ZR16
COMPANY T_A	TAxxx	676.0	225/60R16 98H
COMPANY T_B	TByyy	677.0	225/60R16 98H
COMPANY T_C	TCzzz	677.0	225/60R16 98H
COMPANY T_D	TDaaa	678.0	225/60R16 98H

FIG.34

P001	P002	P011	P012	P092	P001	P002	P091
COMPANY A	AAAAA	2000	195/45ZR16	195/45ZR16	COMPANY T_D	TDbbb	677.5
COMPANY B	BBBBB	4494.0	225/60R16 98H	225/60R16 98H	COMPANY T_A	TAxxx	676.0
COMPANY B	BBBBB	4494.0	225/60R16 98H	225/60R16 98H	COMPANY T_B	TByyy	677.0
COMPANY B	BBBBB	4494.0	225/60R16 98H	225/60R16 98H	COMPANY T_C	TCzzz	677.0
COMPANY B	BBBBB	4494.0	225/60R16 98H	225/60R16 98H	COMPANY T_D	TDaaa	678.0

FIG.35

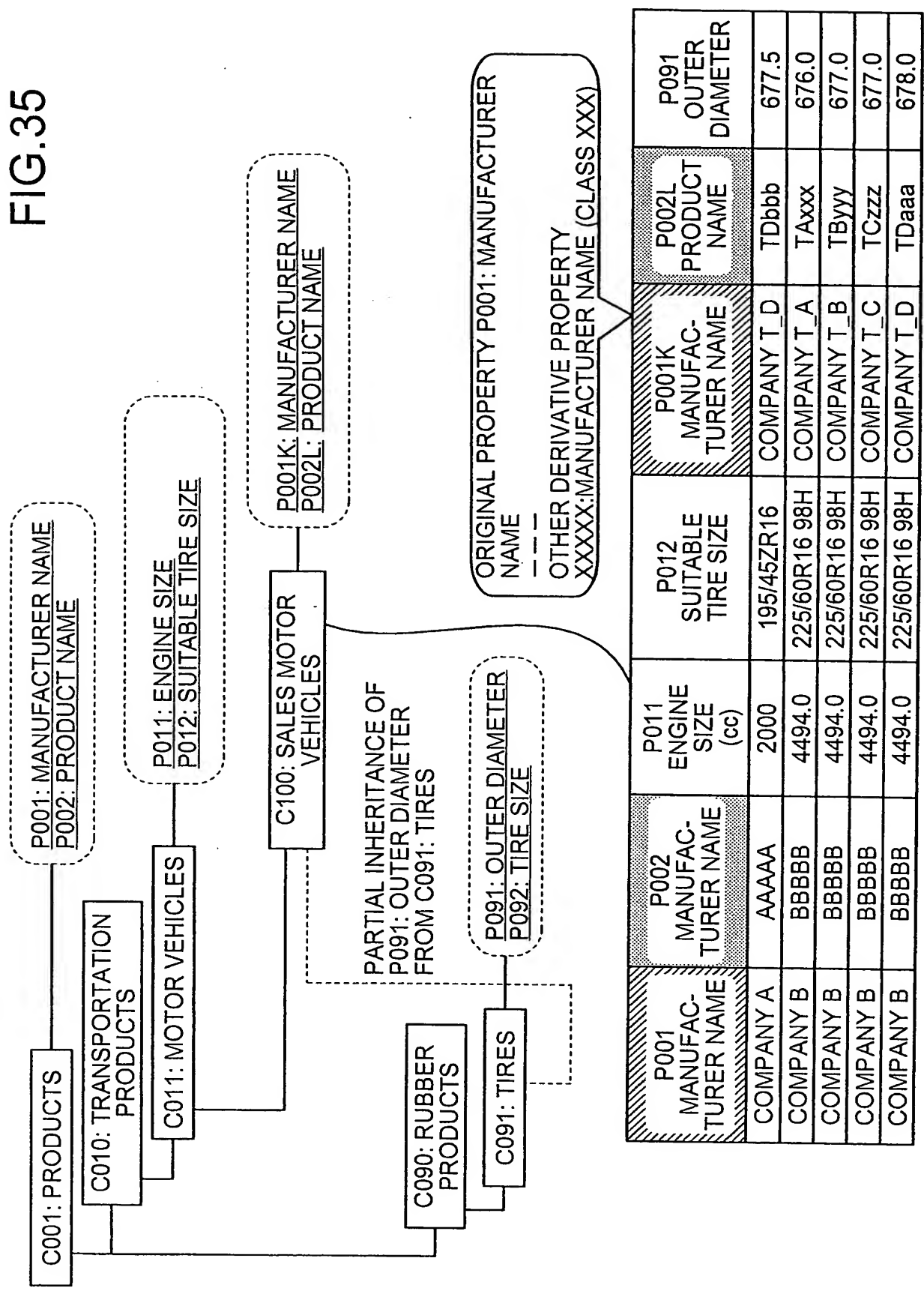


FIG.36

DERIVATIVE IDENTIFIER	RELATION	ORIGINAL IDENTIFIER	ORIGINAL CLASS	DERIVATIVE CLASS
P001K	DUPLICATE DERIVATION	P001	C011	C100
P002L	DUPLICATE DERIVATION	P002	C090	C100

FIG.37

⋮

```
#10=CLASS_BSU('C001', '001', #1)
#100=PROPERTY_BSU('C001', '001', #10)
#20=CLASS_BSU('C100', '001', #1)
#200=PROPERTY_BSU('P001K', '001', '#20')
#300=PROPERTY_RELATION(#100, #200, 'duplication');
```

⋮

FIG.38

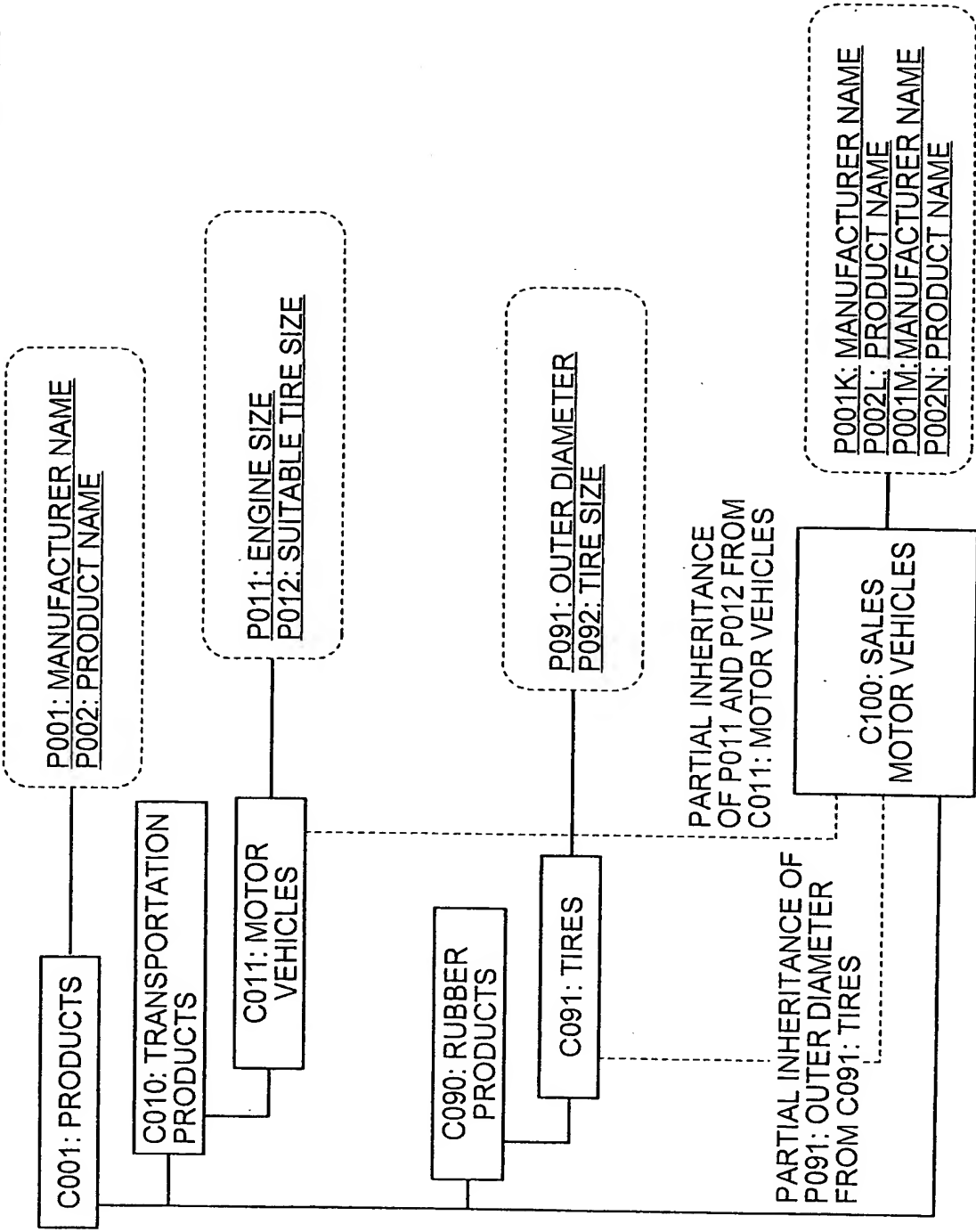


FIG.39

DERIVATIVE IDENTIFIER	RELATION	ORIGINAL IDENTIFIER	ORIGINAL CLASS	DERIVATIVE CLASS
P011K	DUPLICATE DERIVATION	P001	C011	C100
P012L	DUPLICATE DERIVATION	P002	C011	C100
P001M	DUPLICATE DERIVATION	P001	C099	C100
P002N	DUPLICATE DERIVATION	P002	C099	C100